



June 27, 2014

Ms. Deborah R. Pile  
Minnesota Department of Commerce  
Energy Environmental Review and Analysis  
85 Seventh Place East, Suite 500  
St. Paul MN 55101-3165

**Re: Request for a Size Determination for the 100 MW Aurora Distributed Solar Project**

Dear Ms. Pile:

Enclosed please find Aurora Distributed Solar, LLC's ("Aurora") request for a size determination from the Minnesota Department of Commerce ("Department") for Aurora's up to 100 MW-alternating current ("AC") ("100 MW") nameplate capacity distributed solar project (the "Project"). The Project consists of up to 24 different solar facilities sized between 1.5 MW and 10 MW located throughout Xcel Energy's Minnesota service territory. Because the distributed facilities share common characteristics of a single project that exceeds 50 MW, Aurora plans to seek a site permit for the Project from the MPUC.

Aurora appreciates the Department's consideration of this size determination request for the Aurora Project and looks forward to working with interested stakeholders throughout the site permit process. Please let us know if you have any questions or need any additional information to make a determination.

Sincerely,

A handwritten signature in blue ink that reads "Betsy Engelking" is written over a horizontal line. Below the line, the name "Betsy Engelking" is printed in a black sans-serif font.

Vice President  
Geronimo Energy  
betsy@geronimoenergy.com  
952.358.5684

A handwritten signature in blue ink that reads "David Post" is written over a horizontal line.

David Post  
VP Business Development  
Enel Green Power North America  
David.Post@enel.com  
(858) 568 - 8119

Encl: Size Determination Request Form and Exhibit A (Maps)

50862037\_1.DOCX

# Solar Energy Generating Systems Size Determination



## Request Form

This form has been developed by Minnesota Department of Commerce, Energy Environmental Review and Analysis staff, pursuant to Minnesota Statute § 216E.021, to gather information that will assist the Department in determining whether a combination of proposed Solar Energy Generating Systems meets the definition of a large electric power generating plant and is subject of the Minnesota Public Utilities Commission's siting authority.

**Instructions:** Please answer each question as completely as possible. Maps and supporting information should be provided on separate pages and attached.

This form can be made available electronically, and can be completed and submitted as an electronic document.

***Please complete the form, sign it, date it, and return the completed form to:***

Deborah Pile  
Minnesota Department of Commerce  
Office of Energy Security  
85 7th Place East, Suite 500  
St. Paul, MN 55101-2198

Phone: 651-539-1837  
Fax: 651-539-0109  
Email: [deborah.pile@state.mn.us](mailto:deborah.pile@state.mn.us)

### A. Project Description

Please describe the project, including project name, number of Solar Energy Generating Systems in the project, combined nameplate capacity of the Solar Energy Generating Systems in the project and purpose.

Aurora Distributed Solar, LLC ("Aurora") requests that the Minnesota Department of Commerce ("Department") provide a size determination for Aurora's up to 100 MW-alternating current ("AC") ("100 MW") nameplate capacity distributed solar project (the "Project"). The Project consists of up to 24 different solar energy generating systems sized between 1.5 MW and 10 MW located throughout Xcel Energy's Minnesota service territory.

Geronimo Energy, LLC ("Geronimo") proposed the Project as a distributed, renewable alternative to natural gas and market capacity bids submitted through a competitive resource acquisition process to meet Xcel's needs for additional capacity resources. Through the competitive resource process, the Minnesota Public Utilities Commission ("MPUC") evaluated the benefits and impacts of the Project as a whole, noting its positive attributes as a distributed, renewable resource for meeting Xcel's needs. The Project was selected by the MPUC in its May 23, 2014 *Order Directing*

*Xcel to Negotiate Agreements* in Docket No. E002/CN-12-1240 (“PPA Order”) to negotiate a power purchase agreement with Xcel Energy. Aurora is currently negotiating a single 100 MW power purchase agreement with Xcel pursuant to the PPA Order.

Because the distributed facilities share common characteristics of a single project that exceeds 50 MW, Aurora plans to seek a site permit for the Project from the MPUC. Aurora is requesting a size determination from the Department pursuant to Minnesota Statutes Section 21E.021 so that it can proceed with the permitting process and meet the schedules established in Docket No. E002/CN-12-1240.

## **B. Project Design and Location**

Please provide the following information regarding the design and location of the proposed project:

- B.1** Please describe each proposed Solar Energy Generating System including: (1) solar generating equipment and associated facilities, (2) location of the facilities comprising the project (county, township, and sections), (3) the area within the project boundary (acres), and (4) area within the project boundary that will be developed for the solar project (acres).

### **1) Solar Generating Equipment and Associated Facilities**

#### **a) Photovoltaic Arrays and Solar Field**

The solar field at each facility will consist of the following equipment:

- PV modules mounted on a ground mounted tracker system;
- Indoor and/or outdoor solar inverters mounted on metal pad skids;
- Outdoor LV/MV transformers mounted on metal pad skids;
- Electrical cabin(s);
- Solar inverters;
- Security fence;
- Weather station;
- Balance of plant equipment and facilities; and
- Operations and maintenance areas, as applicable.

#### **b) Interconnection Facilities**

The solar energy generating systems are planned to connect directly to the electrical distribution system. The utility will provide a service line (through an aboveground or below-ground distribution feeder) to the points of interconnection, which are located within the facility control boundaries. See maps provided in Exhibit A.

## 2) Location

Aurora is proposing to build up to 24 solar energy generating systems within 16 counties in southern Minnesota. Table B.1.2 lists the locations of each of the proposed facilities:

**Table B.1.2 Location of Distributed Facilities**

Facility	County	Township/Range/Section	Coordinates
Albany	Stearns	Sections 8 & 17, T 125N, R 31W	N45.641536, W94.599465
Annandale	Wright	Section 32, T 121N, R 27W	N45.250813, W94.111136
Atwater	Kandiyohi	Section 1, T 119N, R 33W	N45.140809, W94.769319
Brooten	Stearns	Section 31, T 124N, R 35W	N45.508304, W95.125572
Chisago County	Chisago	Section 12, T 34N, R 21W	N45.452567, W92.902101
Dodge Center	Dodge	Section 32, T 107N, R 17W	N44.026, W92.882
Eastwood	Blue Earth	Section 14, T 108N, R 66W	N44.154883, W93.916250
Fiesta City	Chippewa	Section 9, T 117N, R 40 W	N44.955163, W95.688693
Hastings	Washington	Section 8, T 26N, R 20W	N44.759294, W92.824906
Lake Emily	Le Sueur	Section 24, T 110N, R 26W	N44.322, W93.903
Lake Pulaski	Wright	Section 15, T 120N, R 25W	N45.196, W93.812
Lawrence Creek	Chisago	Section 27, T 34N, R 19W	N45.401744, W92.693699
Lester Prairie	McLeod	Section 25, T 117N, R 27W	N44.908663, W94.028319
Mayhew Lake	Benton	Section 12, T 36N, R 31W	N45.619, W94.152
Montrose	Wright	Section 2, T 118N, R 26W	45.056128, - 93.922565
Paynesville	Stearns	Section 4, 8 & 9, T 122N, R 32W	N45.391063, W94.721433
Pine Island	Goodhue	Section 31, T109N, R 15W	44.205082, - 92.663968
Pipestone	Pipestone	Section 11, T106N, R 46W	N44.003685, W96.335801
Scandia	Chisago	Section 35, T 33N, R 20W	N45.3019, W92.7995
Waseca	Waseca	Section 12, T 17N, R 23W	N44.092142, W93.530960
West Faribault	Rice	Section 2, T 109N, R 21W	N44.274971, W93.310803
West Waconia	Carver	Section 1, T 115N, R 26W	N 44.793445, W93.901329
Wyoming	Chisago	Section 32, T 33N, R 21W	N45.309594, W92.980591
Zumbrota	Goodhue	Section 25, T 110N, R 16W	N44.299, W92.69

### 3) Area within Project Boundary

The solar facilities range in size from 13 to 294 acres, and will have nominal generation capacities (MW-AC) ranging from approximately 1.5 MW to 10.0 MW. Table B.1.3 summarizes the nameplate capacity, number of acres within the land control boundary and preliminary number of acres expected to be developed for each facility. While the aggregate capacity of the Project will not exceed 100 MW, the aggregate nameplate capacity of the facilities listed in Table B.1.3 exceeds 100 MW because the table includes all facilities under consideration. The final list of facilities to be constructed will be determined based on environmental, permitting, interconnection, economic and other considerations.

**Table B.1.3 Capacity and Area of Distributed Facilities**

<b>Facility</b>	<b>MW-AC*</b>	<b>Land Control boundary (acres)</b>	<b>Preliminary Development Area (acres)</b>
Albany	10	230.6	107.4
Annandale	6	70.6	70.6
Atwater	4	40.1	36.3
Brooten	1.5	13.0	13.0
Chisago County	7.5	62.4	60.6
Dodge Center	6.5	68.5	60.0
Eastwood	5.5	49.7	49.7
Fiesta City	2.5	25.6	25.6
Hastings	5	40.6	40.6
Lake Emily	5	46.9	42.4
Lake Pulaski	8.5	75.8	63.2
Lawrence Creek	4	74.3	39.4
Lester Prairie	3.5	29.9	26.0
Mayhew Lake	4	36.0	21.8
Montrose	4	37.7	34.8
Paynesville	10	261.9	108.4
Pine Island	4	45.9	39.6
Pipestone	2	15.8	14.7
Scandia	2.5	24.4	23.3

<b>Facility</b>	<b>MW-AC*</b>	<b>Land Control boundary (acres)</b>	<b>Preliminary Development Area (acres)</b>
Waseca	10	89.2	85.2
West Faribault	5.5	85.5	59.4
West Waconia**	8.5	75.7	78.1
Wyoming	7	67.3	62.0
Zumbrota	3.5	35.6	31.9

\* The final MW-AC nameplate capacity of each solar energy generating system may vary based on the technology selected and final design.

\*\* Preliminary Development Area boundary is larger than the Facility Land Control boundary in this particular instance to accommodate possible interconnection in the public right-of-way on the north side of Highway 5/25.

- B.2** Please describe the anticipated point of electrical interconnection for each Solar Energy Generating System. If the interconnect is anticipated to be at a transmission level, please describe the status of the proposed Solar Energy Generating System within the Midwest Independent Transmission System Operator (MISO) interconnection queue. If any Solar Energy Generating System has been given a MISO project number, please include it.

The anticipated point of interconnection for each solar energy generating system is shown on Exhibit A. Aurora has submitted distribution interconnection requests to Xcel Energy for each of its planned facilities. Each of the requests has been accepted as complete by Xcel Energy, and engineering analysis for each facility is either pending or complete. All engineering studies are expected to be complete mid-summer 2014.

- B.3** A map of each Solar Energy Generating System showing the proposed facility boundary, the interconnection site, anticipated solar module layout, and associated facilities. "Associated facilities" includes access roads, collector and feeder lines, and substations.

The map should be a USGS survey map or current aerial photography or similar. The map must include a scale.

Exhibit A includes maps of the Project, including an overview map and maps of each facility showing the facility control boundary (area under purchase, easement or lease), the preliminary planned point of interconnection, current anticipated solar module layout and associated facilities are also depicted on the maps; however, they may be modified based on environmental, permitting, interconnection, economic and other considerations.

## C. Applicant Information

- C.1** Please provide the name, address, e-mail, and telephone number of the applicant and any authorized representative.

**Name:** Aurora Distributed Solar, LLC

**Address:** One Tech Drive, Suite 220  
Andover MA 01810

**Telephone:** (858) 568 - 8119

**Authorized Representative:** David Post

- C.2** Please provide the name, address, e-mail, and telephone number of the person or persons who would prepare the application to the Minnesota Public Utilities Commission or to a Minnesota county or local unit of government, if such an application would be prepared by an agent or consultant of the applicant.

Nathan Franzen  
Director of Solar  
Geronimo Energy  
7650 Edinborough Way,  
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(612) 875-6457

- C.3** Please briefly describe the applicant's business entity including its ownership and financial structure.

Aurora Distributed Solar, LLC is a Delaware limited liability company authorized to do business in Minnesota. Aurora is a wholly-owned subsidiary of Enel Kansas, LLC. Enel Kansas, LLC is a wholly-owned subsidiary of Enel Green Power North America, Inc. ("EGPNA"). As discussed in Section 3.2 of Geronimo's April 15, 2013 Distributed Solar Energy Proposal in Docket No. E002,CN/12-1240, Geronimo Energy and EGPNA are strategic partners, and EGPNA has significant experience owning and operating renewable projects throughout North America. EGPNA recently acquired the Project from Geronimo to facilitate the next stages of project development and financing.

Responses to Questions C.4 and D.3 provide a list of the special purpose vehicles and ownership structure that will be utilized for the Project.

- C.4** Please provide the Minnesota Secretary of State organizational ID number for the applicant business entity, all subordinate entities, and all solar developer entities involved with the project.

Permittee: Aurora Distributed Solar, LLC: 5509672(DE); MN 764332000021

Developer: Geronimo Energy, LLC: 2361733-3

Special Purpose Vehicles (wholly-owned subsidiaries of Aurora Distributed Solar, LLC):

NAME	MINNESOTA ORGANIZATIONAL ID #
Albany Solar, LLC	764276700088
Annandale Solar, LLC	764276700076
Atwater Solar, LLC	764276700064
Brooten Solar, LLC	764431400022
Chisago Solar, LLC	764276700052
Dodge Center Distributed Solar, LLC	764276700040
Eastwood Solar, LLC	764276700038
Fiesta City Solar, LLC	764276700033
Hastings Solar, LLC	764275500045
Lake Emily Solar, LLC	764276700026
Lake Pulaski Solar, LLC	764275500110
Lawrence Creek Solar, LLC	764275500108
Lester Prairie Solar, LLC	764275500095
Mayhew Lake Solar, LLC	764275500083
Montrose Solar, LLC	764275500071
Paynesville Solar, LLC	764275500069
Pine Island Distributed Solar, LLC	764275500057
Pipestone Solar, LLC	764275500021
Scandia Solar, LLC	764431400034
Waseca Solar, LLC	764431400046
West Faribault Solar, LLC	764431400058
West Waconia Solar, LLC	764431400072
Wyoming Solar, LLC	764431400060
Zumbrota Solar, LLC	764431400084

- C.5** Please identify and provide contact information for the person or persons who would be the permittees, if different than the applicant, if the Solar Energy Generating Systems were permitted by the Minnesota Public Utilities Commission, and, alternately, if they were permitted by a Minnesota county.

Aurora Distributed Solar, LLC will be the permittee if the Project is permitted by the MPUC. Each of the underlying SPVs and associated facilities will be covered by a



single site permit, and Aurora will remain the permittee with ultimate responsibility for complying with all permit conditions.

## D. Project Characteristics

### D.1 Please describe who will be constructing the project.

Aurora has not yet selected a contractor to build the project. Aurora anticipates it will use one or more experienced contractors to build the entire Project.

### D.2 Please describe who will be operating and maintaining the project.

Aurora has not yet selected a contractor to operate and maintain the Project. Operations and maintenance activities will be conducted in conformance with prudent industry standards and most likely through a combination of affiliate employees and one or more qualified third party contractors. Aurora will continue to oversee all operations and maintenance activities.

### D.3 Please describe the ownership structure, sales agreement(s), interconnection(s), revenue sharing, common debt or equity financing, and any other shared characteristics of the project's Solar Energy Generating Systems.

Overall: The Project was proposed as a 100 MW nameplate capacity project as part of Xcel Energy's competitive resource acquisition process in Docket No. E002/CN-12-1240. In that docket, the MPUC evaluated the benefits and impacts of the 100 MW distributed project comprised of the facilities proposed herein as compared to other bid proposals and determined that the Project was the most reasonable and prudent alternative to meet Xcel's needs. The MPUC's evaluation considered the entire 100 MW Project, recognizing its unique benefits as a distributed solar project.

Ownership Structure: Aurora holds the real property rights of each of the facilities and has commenced negotiations with Xcel Energy for a PPA. In order to utilize the Investment Tax Credit, a Federal tax credit available to taxpayers pursuant to the Internal Revenue Code, Aurora has determined that it is necessary to organize a separate limited liability company (commonly referred to as "special purpose vehicle" or "SPV") for each facility. Each of the SPVs listed in C.4 are 100% owned by Aurora Distributed Solar, LLC. Prior to the start of construction of a facility, Aurora will likely transfer all land rights and other assets required to construct and operate the respective facility to a facility SPV to support tax equity financing. Each SPV will remain a wholly-owned subsidiary of Aurora until the date the SPV accepts the tax equity financing, which will likely be just prior to the facility's in-service date but may vary depending upon the tax investor and the final tax structure employed. Aurora anticipates that each SPV will have a substantially identical ownership structure. Aurora has determined that it must utilize the SPVs in order to satisfy the legal and logistical issues related to the different in-service dates (as determined for Federal tax purposes) of each facility in the Project as such relates to how Aurora will monetize the applicable tax credits and net operating losses related to each facility under current tax regulations.

**Umbrella Sales Agreement:** Pursuant to the PPA Order, Aurora is negotiating a power purchase agreement with Xcel under which Aurora will sell the full energy output of the 100 MW Project to Xcel. Under the PPA Order, Aurora and Xcel have up to four months to complete negotiations, and then the PPA will be presented to the MPUC for approval.

**Interconnection:** Each facility will be separately interconnected to Xcel distribution facilities located throughout Xcel's Minnesota service territory.

**Revenue Sharing:** Aurora, likely through the respective SPVs, will earn revenue from the sale of energy and other attributes pursuant to the PPA. Revenue will be used to pay all applicable expenses, including land lease payments, taxes and operation and maintenance expenses. In addition, revenue will be used to pay the lenders, if any, tax equity investors and Project owner in accordance with any loan and investment agreements entered into to finance the development, acquisition of equipment and construction of the Project in the most economic and tax efficient manner available for the Project, as determined by Aurora.

**Common Debt or Equity Financing:** As discussed above, Aurora anticipates securing one or more tax equity investors for the Project. Tax equity is expected to invest in each SPV at the appropriate time to meet ITC eligibility requirements. Aurora intends to seek out a single tax investor or one single tax investor group to invest in all of the facilities comprising the Project.

- D.4** Please identify any existing Solar Energy Generating Systems in Minnesota in which the applicant, or a principal, partner, or affiliate of the applicant, has an ownership or other financial interest.

None.

- D.5** Please identify any Solar Energy Generating Systems in Minnesota which share any of the following with the proposed project: power purchase agreement, interconnection, revenues, debt or equity financing.

Each of the solar energy generating systems listed in B.1 above are part of the Project and share common characteristics as described in D.3. There are no other solar energy generating systems in Minnesota that share a PPA, interconnection, revenues or debt or equity financing with the Project.

## **E. Project Construction**

- E.1** Please provide the anticipated schedule for completing each proposed Solar Energy Generating System, including dates for permitting, construction (start and end dates), and commercial operation.

Aurora plans to submit its site permit application under the MPUC's alternative review process in July 2014. Aurora anticipates the site permit process will take 6 – 9 months to complete, in accordance with Minnesota Statutes and Rules. Aurora plans to begin construction approximately within 90 to 120 days after a site permit is

issued and anticipates construction will take approximately 12 months to complete. The Project's in-service date for all facilities is expected to be no later than December 31, 2016.

**E.2** Please identify any additional Solar Energy Generating Systems in Minnesota in which the applicant (or a principal, partner, or affiliate of the applicant) has an ownership or other financial interest and plans to construct within 12 months of the proposed project.

Geronimo is currently developing the following solar energy generating systems in Minnesota.

- Lindy Solar, LLC, Lindy Solar, Morrison County, 10 MW, Early Stage Development, Unknown Construction
- Sunrise Solar, LLC, Sunrise Solar, Chisago County, 50 MW, Early Stage Development, Unknown Construction
- Mapleton Solar, Blue Earth County, 25 MW, Early Stage Development, Unknown Construction
- Rosemont Solar, Dakota County, 25 MW, Early Stage Development, Unknown Construction

While it is possible that one or more of these projects could be constructed within 12 months of the Aurora Project, the timing of construction of these other projects is unknown at this time and will depend on a number of commercial and environmental considerations.

**Signature:**




David Post

**Title:** VP Business Development, Enel Green Power North America

**Date:** June 27, 2014

**Signature:**

  
Betsy Engelking

**Title:** Vice President, Geronimo Energy

**Date:** June 27, 2014



**REGARDING:** Sno-Go Trail Intersection with the Aurora Solar Project – West Faribault Facility  
**MEETING:** Phone Conversation  
**DATE:** 6-12-2014  
**ATTENDEES:** Petros Paulos (Geronimo Energy Solar Intern), Richard Larson (Sno-Go Trail Administrator)  
**NOTES BY:** Petros Paulos

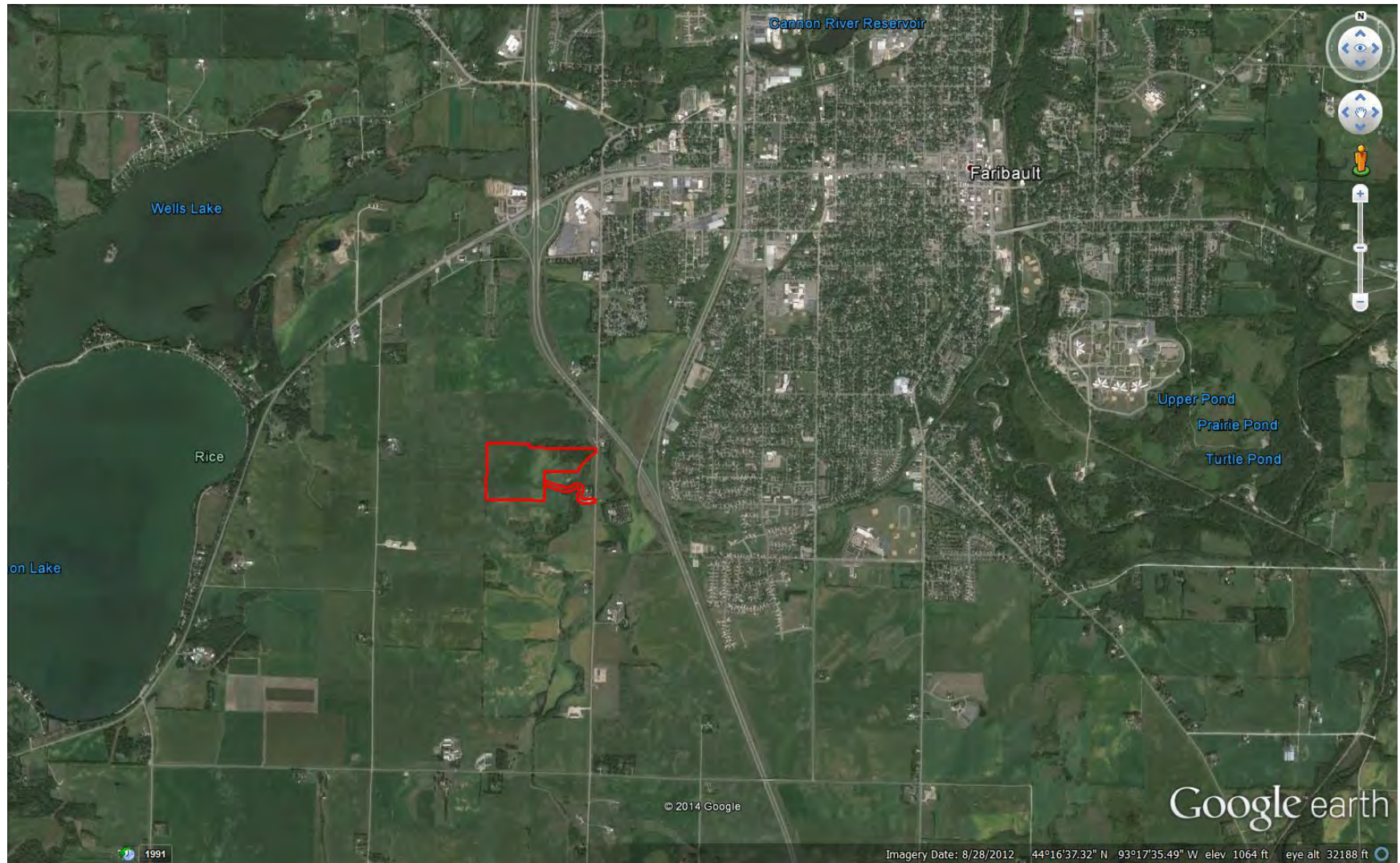
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- Mr. Richard Larson, the Sno-Go Trail Administrator<sup>1</sup>, was contacted via a phone call (contact information below) on Thursday June 12, 2014 with an inquiry on the protocol that Sno-Go would require to relocate a trail that intersected the West Faribault facility for the Aurora Solar Project.
- Mr. Larson stated, that Geronimo Energy would only be required to provide the Sno-Go trail Administrator (Mr. Larson), with a map of where the solar farm will be located and Sno-Go would move the trail a safe distance around the solar facility. Mr. Larson also stated, that this should be done with any potential construction that may impede a Sno-Go trail by early fall at the latest so Sno-Go would have ample time to adjust the trail for the upcoming winter snowmobilers.
- As a result of the phone conversation, Mr. Paulos emailed Mr. Larson a map of the outline of the solar farm. It should be noted that this map only showed the development area boundary, not including: the details on the arrays, grading or any other construction notes.

Contact information  
Richard Larson, Sno-Go Trail Administrator  
507-323-0174

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<sup>1</sup> <http://sno-go.org/club-info/club-officers/>





## Maps Sent to Agencies